TOPOGRAPHIC SURVEY CONTROL POINT RECORD

STATION LONG NAME	MU16	
STATION NUMBER	MU16	
4 CHAR ID	MU16	
COUNTRY	IRAQ	
LOCATION	AL MUTHANNA	
SURVEYING AGENCY	IGRS	
DATE (OF DESCRIPTION)	04 JUL 05	

CONTENTS	YES	NO	NO OF PAGES
FIELD COORDINATE VALUES	Х		1
OFFICE COORDINATE VALUES	Х		1
STATION MONUMENT & SITE DETAILS	Х		1
STATION DIAGRAM	Х		1
ACCESS MAP	Х		1
ACCESS DESCRIPTION	Х		1
APPROACH PHOTOGRAPHS	Х		1
CARDINAL POINT PHOTOGRAPHS	Х		2

RECORD OF VISITS

DATE OF VISIT	NAME	UNIT	REMARKS

ADDITIONAL DETAILS/ENCLOSURES

CONTENTS	NO OF PAGES

SECURITY CLASSIFICATION

FIELD COORDINATE VALUES

STATION LONG NAME	MU16
4 CHAR ID	MU16
STATION NUMBER	MU16

THIS STATION IS NEW	YES
IDENTICAL / NEARLY IDENTICAL WITH	N/A

FIELD VALUES FROM THE RECEIVER / HAND HELD GPS – IN WGS84

LATITUDE N	31° 01' 35.10"	
LONGITUDE E	045° 06' 03.20"	
HT (M)	+8	
GRID ZONE DESIGNATOR	38R	
UTM / MGRS GRID	38R NV 096 325	
SURVEYING AGENCY	IGRS	

FIELD INPUT BY: L/CPL COWARD	UNIT: IGRS	DATE: 04 JUL 05
FIELD CHECKED BY: CPL RIGGOTT	UNIT: IGRS	DATE: 04 JUL 05

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OFFICE COORDINATE VALUES

WGS 84 ADJUSTED VALUES AS AT: 25 Aug 05

LATITUDE N	31° 01' 35.17385"	
LONGITUDE E	045° 06' 03.20308"	
SPHEROIDAL HT (M)	64.032	
EGM96 GEOID MODEL HT (M)	-6.334	
ORTHOMETRIC HT (M)	70.366	
VERTICAL DATUM	WGS 84	
GEOID MODEL USED	EGM 96	
RELATIVE TO	CORS STATIONS	
RELATIVE POSITION ACCURACY	0.027	
RELATIVE HEIGHT ACCURACY	0.031	
ADJUSTING AGENCY	OPUS	
ADJUSTMENT DATE	25 AUG 2005	

LOCAL DATUM VALUES AS AT: 25 Aug 05

SPHEROID	N/A
PROJECTION	N/A
GRID	N/A
VERTICAL DATUM	N/A
LATITUDE N/S	N/A
LONGITUDE E/W	N/A
EASTINGS (M)	N/A
NORTHINGS (M)	N/A
SPHEROIDAL HT (M)	N/A
ORTHOMETRIC HT (M)	N/A
GRID ZONE DESIGNATOR	N/A
TRANSFORMATION AGENCY	N/A
TRANSFORMATION DATE	N/A

GRAVITY VALUE: N/A TYPE OF STN: N/A		REF: N/A	
AIR PHOTO: N/A	REF: N/A	SCALE: N/A	
IMAGERY: N/A	REF: N/A	SCALE: N/A	

OFFICE INPUT BY: LCPL COWARD	UNIT: IGRS	DATE: 25 AUG 2005
OFFICE CHECKED BY: LCPL DICKEN	UNIT: IGRS	DATE: 25 AUG 2005

STATION MONUMENT AND SITE DETAILS

STATION LONG NAME: MU16

STATION NUMBER: MU16 4 CHAR ID: MU16

LOCATION: AL MUTHANNA COUNTRY: IRAQ

STATION ADDRESS:

N/A

TEL: N/A FAX: N/A

LAND OWNER ADDRESS:

N/A

TEL: N/A FAX: N/A

TYPE OF MARK: HARN

CONDITION: GOOD

MARK SETTING: FINE MARK ON REBAR NO OF REBARS: 3

MONUMENT PHOTO / SKETCH



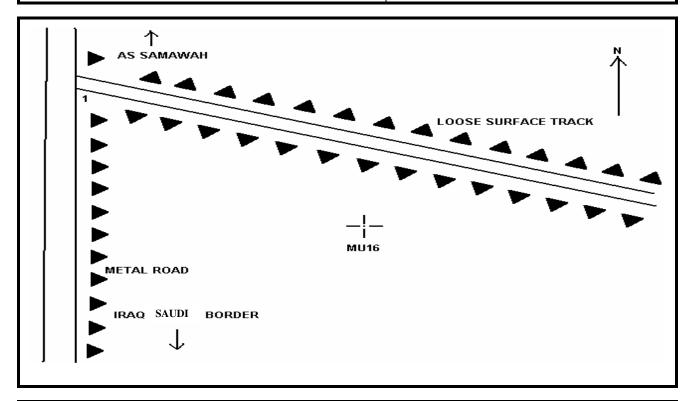
PREPARED BY: L/CPL COWARD	UNIT: IGRS	DATE: 04 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 05

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REVISION DATE: 05 FEB 98 TOPO FORM 01d

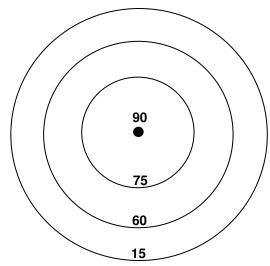
STATION DIAGRAM

STATION LONG NAME: MU16
STATION NUMBER: MU16
4 CHAR ID: MU16



NO	DESCRIPTION	BRG/HORZ ANGLE	DISTANCE m
1	ROAD JUNCTION	136°	70
2			
3			
4			

OBSCURITY DETAILS



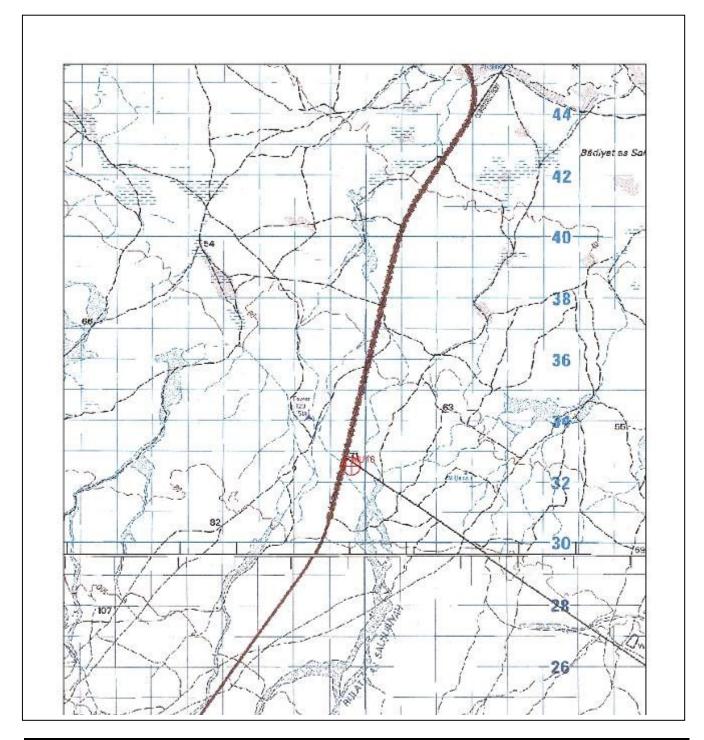
PREPARED BY: LCPL COWARD	UNIT: IGRS	DATE: 04 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 05

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ACCESS MAP

STATION LONG NAME: MU16
STATION NUMBER: MU16
4 CHAR ID: MU16

MAP DETAILS	SERIES: K643	SHEET: 5052
EDITION: 4-NIMA	SCALE: 1: 100 000	GR: 38R NV 096 325



PREPARED BY: SPR WILLIE	UNIT: IGRS	DATE: 05 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 05 JUL 05

ACCESS DESCRIPTION

STATION LONG NAME: MU16
STATION NUMBER: MU16
4 CHAR ID: MU16

MAP DETAILS	SERIES: K643	SHEET: 5052
EDITION: 4-NIMA	SCALE: 1: 100 000	GR: 38R NV 096 325

From major road junction West of As Samawah Grid reference 38R NV066 597. Follow metal road South for approximately 29 kilometres up to a track road traveling East at Grid Reference NV 095 329. Follow track for approximately 300m. Point is South of track approximately 60m Grid Reference 38R NV 0962 3253. Harn identified by orange Survey Marker marks the point. The fine point is an indent on the head of rebar/rod.

PREPARED BY: SPR WILLIE	UNIT: IGRS	DATE: 05 JUL 05
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 05 JUL 05

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REVISION DATE: 05 FEB 98 TOPO FORM 01g

APPROACH PHOTOGRAPHS

STATION LONG NAME: MU16

STATION NUMBER: MU16 4 CHAR ID: MU16

NEAR APPROACH FACING WEST



FAR APPROACH FACING WEST



TAKEN BY: LCPL COWARD DATE TAKEN: 04 JUL 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU16

STATION NUMBER: MU16 4 CHAR ID: MU16

NORTH



SOUTH



TAKEN BY: LCPL COWARD DATE TAKEN: 04 JUL 05

CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU16

STATION NUMBER: MU16 4 CHAR ID: MU16

EAST



WEST



TAKEN BY: LCPL COWARD DATE TAKEN: 04 JUL 05